Profile/Photo Observation Report

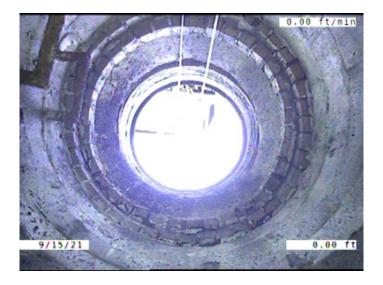
-		-				ROBOTICS
Date:	09/15/2021	Weather:			Coding:	PACP 7.0
Pipe Length (ft): 298.9	Owner:	City of Ho	obart	Pre Clean:	Heavy Cleaning
P.O.#:	YES502259	Surveyor:	S. Bucklin	1	PSR:	P-504-055-054
Customer:	City of Hobart	Clean Date	: 09/07/20	21	Shape:	с
Street:	North Guyer Stree	t	Flow Contr	ol:	Not Controlled	
City:	Hobart, IN		Year Renew	ved:		
Location:	Alley		Tape/Medi	a #:		
Purpose:	Routine Assessme	nt	Dia/Height	:	10"	
Use:	Sanitary Sewage P	ipe	Material:		СР	
Drain Area:			Lining:		None	
Category:	NA					
Comment:						
Location Detai	ls:		Direction o	f Survey:	Upstream	
US MH:	M-504-054	DS MH:	M-504-055	Tot	al Length Surveyed (ft):	298.9
O&M Index:	1.99	O&M Quick	:	4331	O&M Rating:	173.00
Structural Index:	2.69	Structural Q	uick:	5346	Structural Rating:	86.00
Overall Index:	2.18	Overall Quid	:k:	5349	Overall Rating:	259.00

	Position	Code	Observation	Video (sec)	Grade
504-	055				
\leq	0.	AMH	Manhole	2	NA
	.0	MWL	Miscellaneous Water Level	73	NA
	.0	DSF(S01)	Deposits Settled Fine	85	M 2
	a \ <u>5.0</u>	В	Broken	160	S 4
	5.6	ТВ	Tap Break-in/Hammer	211	NA
	19.1	TBD	Tap Break-in/Hammer Defective	358	M 3
H.	۱ 19.5	OBB	Obstruction Brick or Masonry	405	M 2
	22.1	ТВС	Tap Break-in Capped	451	NA
	\\34.6	MWLS(S02)	Miscellaneous Water Level Sag	506	S 2
	\42.0	TBI	Tap Break-in Intruding	589	M 2
	57.1	В	Broken	690	S 4
	57.7	TBI	Tap Break-in Intruding	835	M 2
	1 64.5	MWLS(F02)	Miscellaneous Water Level Sag	889	S 2
	65.2	FL	Fracture Longitudinal	969	S 3
	٦ / 67.6	MWLS(S03)	Miscellaneous Water Level Sag	1011	S 2
	77.9	MCU	Miscellaneous Camera Underwater	1108	M 4
	1 80.1	RFJ	Roots Fine Joint	1176	M 1
	86.9	MCU	Miscellaneous Camera Underwater	1298	M 4
	89.3	RFJ	Roots Fine Joint	1384	M 1

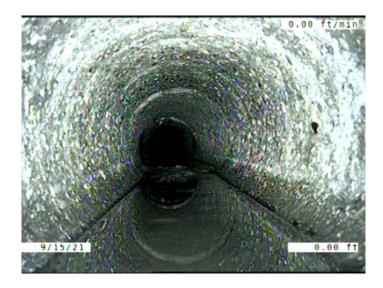
Wednesday, December 8, 2021

RedZone[®]

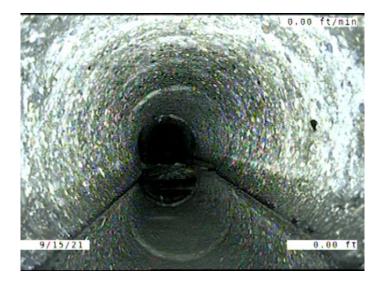
89.3	MWLS(F03)	Miscellaneous Water Level Sag	1403	S 2
92.3	RFJ	Roots Fine Joint	1475	M 1
98.0	RFJ	Roots Fine Joint	1551	M 1
98.4	RMB	Roots Medium Barrel	1621	M 4
98.5	В	Broken	1701	S 4
100.9	RFJ	Roots Fine Joint	1781	M 1
101.2	ISJ	Infiltration Stain Joint	1807	M 1
102.2	MWL	Miscellaneous Water Level	1830	NA
107.5	DAE	Deposits Attached Encrustation	1925	M
111.2	В	Broken	2038	S 4
111.4	ТВІ	Tap Break-in Intruding	2087	M
111.4	DAE	Deposits Attached Encrustation	2103	M
111.7	RFJ	Roots Fine Joint	2143	M
119.3	RFJ	Roots Fine Joint	2315	M
137.3	MWL	Miscellaneous Water Level	2482	NA
141.7	ТВІ	Tap Break-in Intruding	2609	M
149.7	MWLS(S04)	Miscellaneous Water Level Sag	2679	S 2
160.3	ТВІ	Tap Break-in Intruding	2840	M
175.9	MWLS(F04)	Miscellaneous Water Level Sag	3059	S 2
181.8	BSV	Broken Soil Visible	3115	S 5
182.1	ТВІ	Tap Break-in Intruding	3145	M2
203.6	ТВІ	Tap Break-in Intruding	3327	M
220.4	MWLS(S05)	Miscellaneous Water Level Sag	3439	S 2
222.5	FM	Fracture Multiple	3510	S 4
222.9	ТВІ	Tap Break-in Intruding	3545	M
253.0	MWLS(F05)	Miscellaneous Water Level Sag	3719	S 2
257.7	HVV	Hole Void Visible	3817	S 5
257.8	TBI	Tap Break-in Intruding	3905	M
260.0	В	Broken	3973	S 4
260.2	ТВІ	Tap Break-in Intruding	3997	M
291.2	HVV	Hole Void Visible	4212	S 5
291.3	ТВІ	Tap Break-in Intruding	4288	M
// 294.2	ТВІ	Tap Break-in Intruding	4368	M
// 298.1	DSF(F01)	Deposits Settled Fine	4429	M2
/	AMH	Manhole	4547	NA



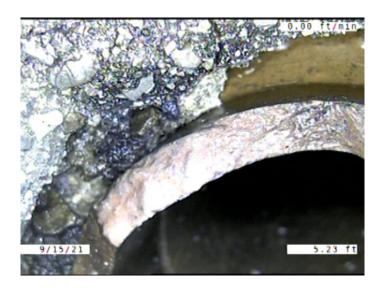
Code:	AMH
Description:	Manhole
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-504-055



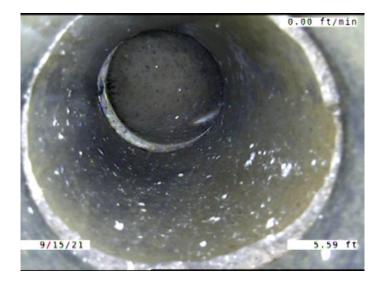
Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



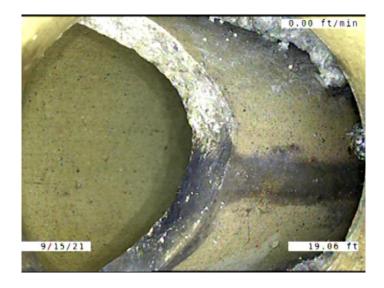
Code:	DSF
Description:	Deposits Settled Fine
	_
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S01
Within 8" of Joint:	YES
Remarks:	



Code:	B
Description:	Broken
Distance (ft):	5.0
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	12
1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	YES



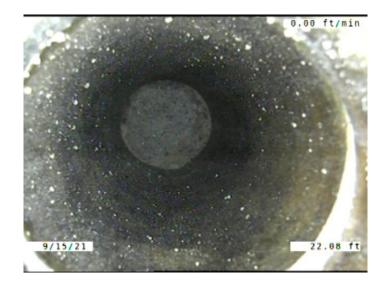
Code:	ТВ
Description:	Tap Break-in/Hammer
Distance (ft):	5.6
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	TBD Tap Break-in/Hammer Defective
Distance (ft): Structural Grade:	19.1 0
O&M Grade:	3
Clock Start/From: Clock To:	12
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index: Within 8" of Joint:	YES
Remarks:	Defective



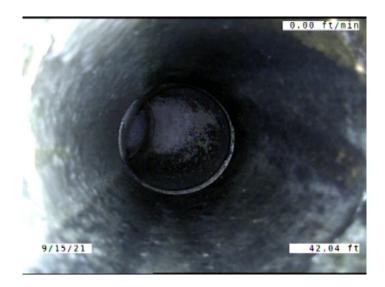
Code: Description:	OBB Obstruction Brick or Masonry
Distance (ft):	19.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	6
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TBC Tap Break-in Capped
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	22.1 0 0 12 4.000
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	34.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S02
Within 8" of Joint:	NO
Remarks:	



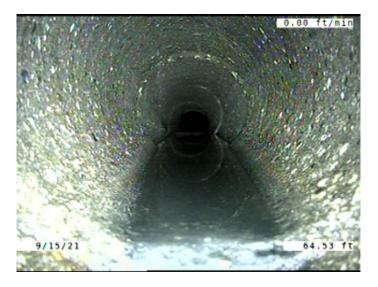
Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	42.0 0 2 12 4.000 1.000 YES



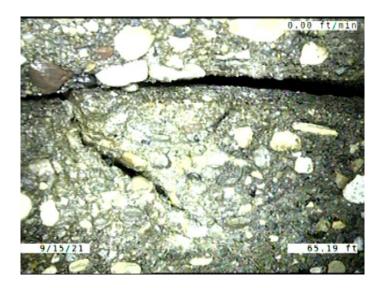
Code:	В
Description:	Broken
	4
Distance (ft):	57.1
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	2
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



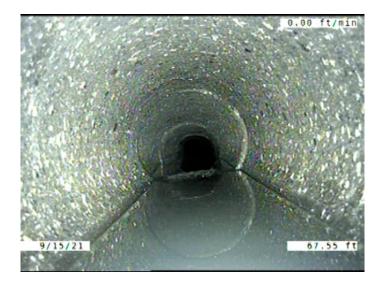
Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:	57.7 0 2 1 4.000 2.000
Remarks:	NO



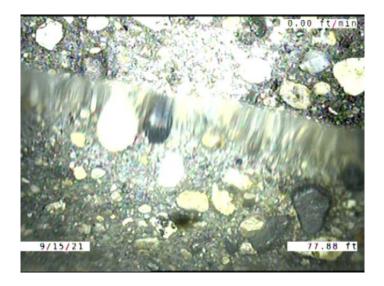
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	64.5
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F02
Within 8" of Joint:	NO
Remarks:	



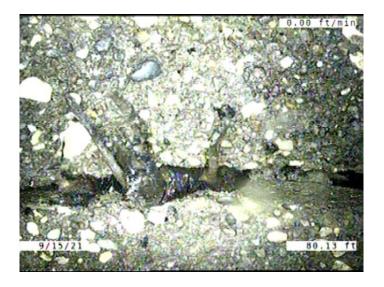
Code: Description:	FL Fracture Longitudinal
Distance (ft): Structural Grade:	65.2 3
O&M Grade:	0
Clock Start/From: Clock To:	8
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



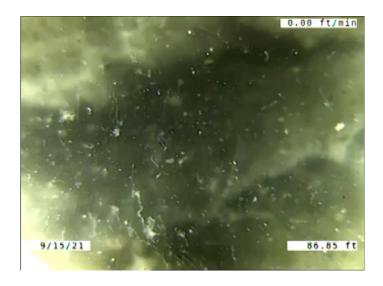
Code:	MWLS
Description:	Miscellaneous Water Level Sag
Distance (ft):	67.6
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S03
Within 8" of Joint:	NO
Remarks:	



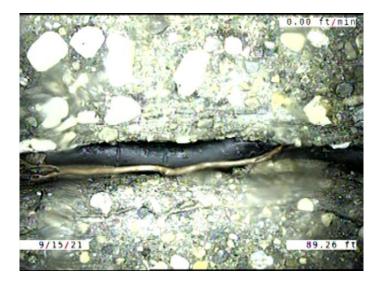
Code: Description:	MCU Miscellaneous Camera Underwater
Distance (ft):	77.9
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



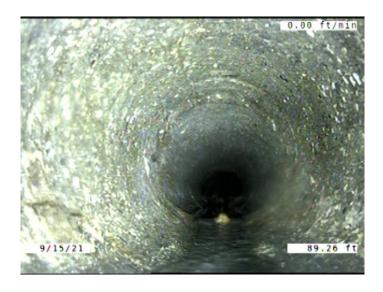
Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	90.1
Distance (ft):	80.1
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	10
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



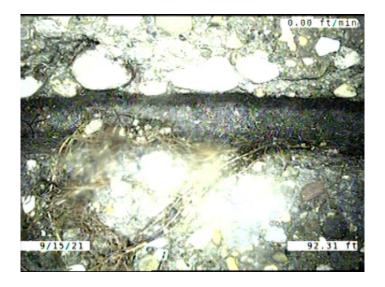
Code: Description:	MCU Miscellaneous Camera Underwater
Distance (ft):	86.9
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	Out at 87.4



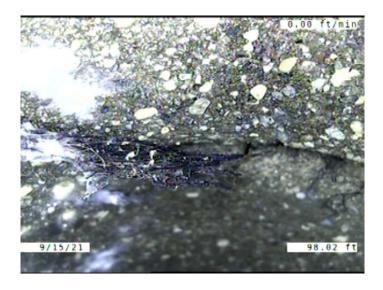
Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	89.3
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	9
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



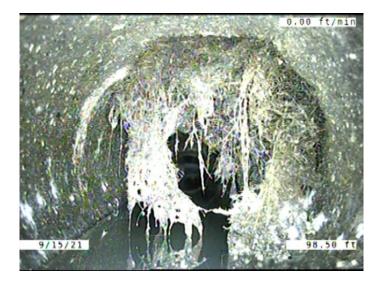
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	89.3
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F03
Within 8" of Joint:	NO
Remarks:	



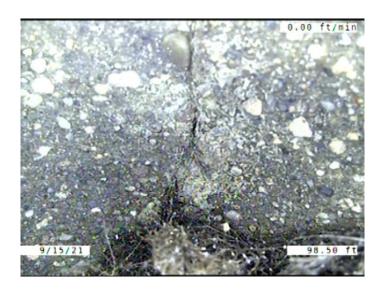
RFJ
Roots Fine Joint
92.3
-
0
1
10
12
YES



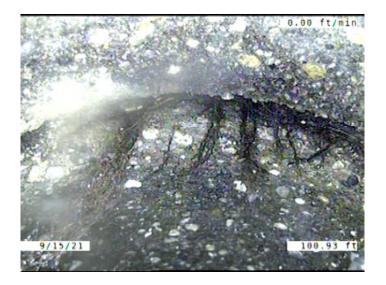
RFJ Roots Fine Joint
98.0
0
1
8
9
YES



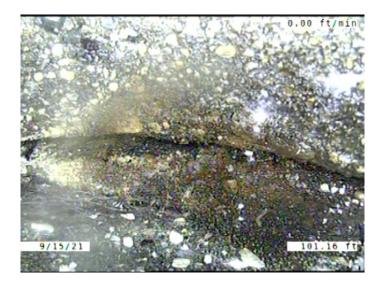
Code:	RMB
Description:	Roots Medium Barrel
Distance (ft):	09.4
Distance (ft):	98.4
Structural Grade:	0
O&M Grade:	4
Clock Start/From:	11
Clock To:	5
1st Value:	
2nd Value:	
Value Percent:	40.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



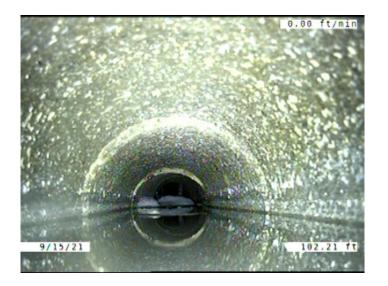
B Broken
98.5
4
0
12
2
YES



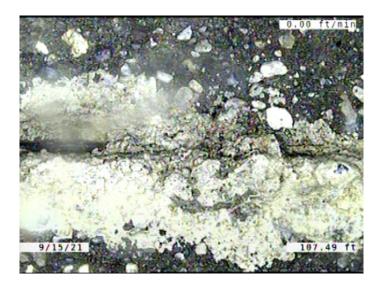
RFJ
Roots Fine Joint
100.9
_
0
1
10
2
YES



Code: Description:	ISJ Infiltration Stain Joint
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	101.2 0 1 2 4
Within 8" of Joint: Remarks:	YES



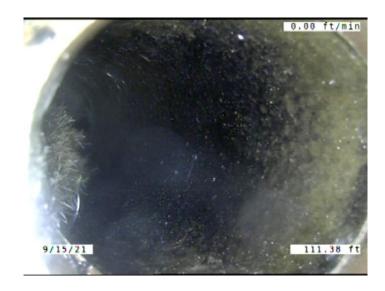
Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	102.2
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	20.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



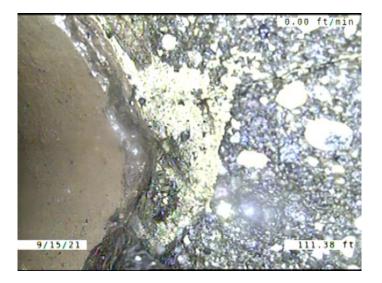
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value:	107.5 0 2 10 2
Value Percent: Continuous Index:	5.000
Within 8" of Joint: Remarks:	YES



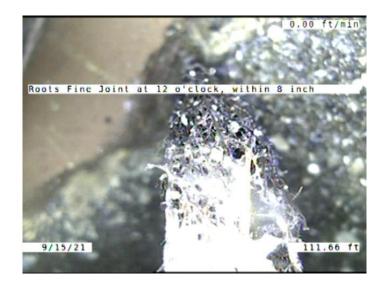
Code:	В
Description:	Broken
Distance (ft):	111.2
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	10
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	111.4 0 2 11 4.000 1.000 NO



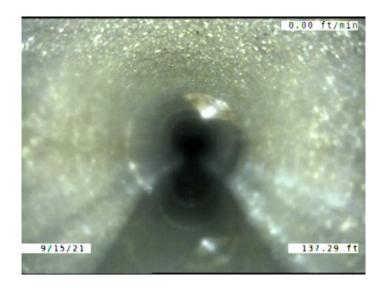
Code: Description:	DAE Deposits Attached Encrustation
Distance (ft):	111.4
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	RFJ Roots Fine Joint
Distance (ft):	111.7
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



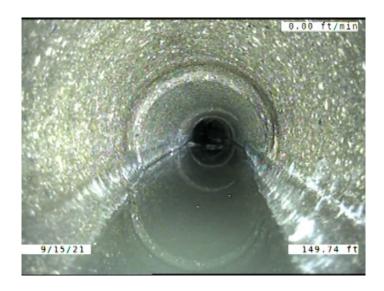
Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	119.3
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	2
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: Description:	MWL Miscellaneous Water Level
Distance (ft):	137.3
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	ТВІ
Description:	Tap Break-in Intruding
Distance (ft):	141.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



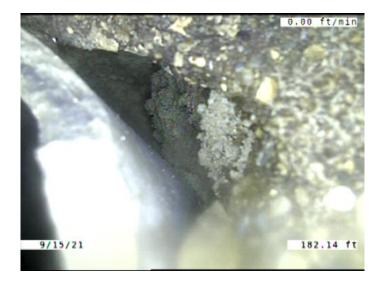
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	149.7
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	15.000
Continuous Index:	S04
Within 8" of Joint:	NO
Remarks:	



ТВІ
Tap Break-in Intruding
160.3
0
2
12
4.000
2.000
NO
CONTSTANTLY RUNNING WATER



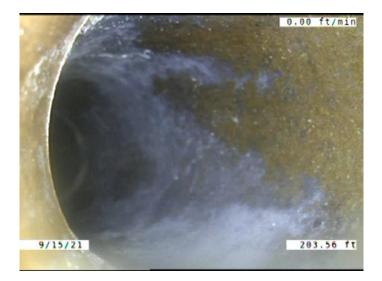
Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	175.9
Structural Grade:	2
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	15.000
Continuous Index:	F04
Within 8" of Joint:	NO
Remarks:	



BSV Broken Soil Visible
181.8
5
0
12
3
NO



Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	182.1 0 2 1 4.000 1.000 NO



Code:	ТВІ
Description:	Tap Break-in Intruding
Distance (ft):	203.6
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	3.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft): Structural Grade:	220.4 2
O&M Grade: Clock Start/From:	0
Clock To: 1st Value:	
2nd Value:	
Value Percent: Continuous Index:	10.000 S05
Within 8" of Joint: Remarks:	NO
Nemarks.	



Code: Description:	FM Fracture Multiple
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	222.5 4 0 11 3
Within 8" of Joint: Remarks:	NO



Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From:	222.9 0 2 1
Clock To: 1st Value: 2nd Value:	4.000
Value Percent: Continuous Index: Within 8" of Joint: Remarks:	ΝΟ ΑCTIVITY



Code: Description:	MWLS Miscellaneous Water Level Sag
Distance (ft):	253.0
Distance (ft): Structural Grade:	255.0
	-
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F05
Within 8" of Joint:	NO
Remarks:	



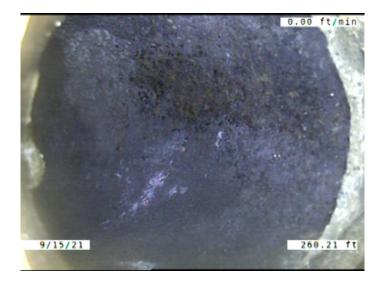
Distance (ft): 257.7	HVV	Code:
Structural Grade: 5	Hole Void Visible	Description:
O&M Grade:OClock Start/From:2Clock To:11st Value:-2nd Value:-Value Percent:-Continuous Index:NOWithin 8" of Joint:NORemarks:-	5 0 2	Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint:



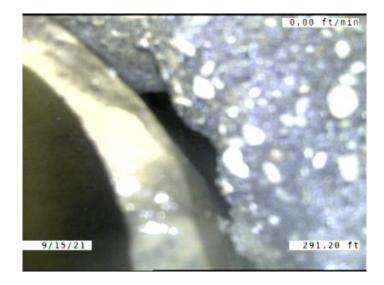
Code:	ТВІ
Description:	Tap Break-in Intruding
	257.0
Distance (ft):	257.8
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	2.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



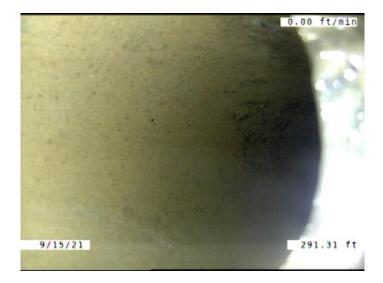
Code: Description:	B Broken
Distance (ft):	260.0
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	11
Clock To:	12
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code:	ТВІ
Description:	Tap Break-in Intruding
Distance (ft):	260.2
(<i>)</i>	
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	11
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



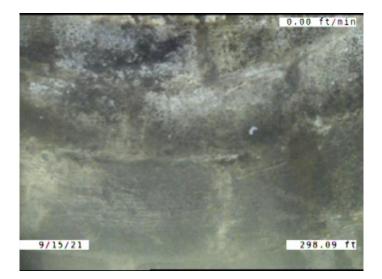
Code: Description:	HVV Hole Void Visible
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index:	291.2 5 0 3
Within 8" of Joint: Remarks:	ΝΟ



Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	291.3 0 2 1 4.000 2.000 NO



Code: Description:	TBI Tap Break-in Intruding
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value: 2nd Value: Value Percent: Continuous Index: Within 8" of Joint: Remarks:	294.2 0 2 11 4.000 3.000



Code:	DSF
Description:	Deposits Settled Fine
Distance (ft):	298.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	5
Clock To:	7
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F01
Within 8" of Joint:	YES
Remarks:	



Code: Description:	AMH Manhole
Distance (ft):	298.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-504-054